29 sept. 98

IN THE CLAIMS:

1. (Cancelled)

2. (Previously Presented) A receiving circuit comprising:

an antenna and a radio unit for receiving a signal transmitted via a radio link;

a plurality of finger receivers for inversely diffusing the signal received by the antenna and the radio unit in association with respective multiple paths;

a synthesizer for synthesizing signals inversely diffused by said finger receivers;

means for controlling a number of finger receivers to operate, among said plurality of finger receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit; and

means for controlling a number of finger receives to operate if a speech signal or data is not contained in the signal received by the antenna and the radio unit, based on a number of base stations which are communicating with the receiving circuit.

3. (Previously Presented) A receiving circuit comprising:

an antenna and a radio unit for receiving a signal transmitted via a radio link;

a plurality of finger receivers for inversely diffusing the signal received by the antenna and the radio unit in association with respective multiple paths;

a synthesizer for synthesizing signals inversely diffused by said finger receivers;

means for controlling a number of finger receivers to operate, among said plurality of finger receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit; and

means for controlling a number of finger receives to operate if a speech signal or data is not contained in the signal received by the antenna and the radio unit, based on whether the receiving circuit is in a soft hand-over mode or not.

4. (Previously Presented) A receiving circuit comprising:

an antenna and a radio unit for receiving a signal transmitted via a radio link;

a plurality of finger receivers for inversely diffusing the signal received by the antenna and the radio unit in association with respective multiple paths;

a synthesizer for synthesizing signals inversely diffused by said finger receivers;

means for controlling a number of finger receivers to operate, among said plurality of finger receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit;

means for controlling a number of finger receivers to operate if a speech signal or data is not contained in the signal received by the antenna and the radio unit, based on whether the receiving circuit is in a soft hand-over mode or not; and

means for operating as many finger receivers as a number of base stations which are communicating with the receiving circuit if the receiving circuit is in the soft hand-over mode, and operating a minimum number of finger receivers required to detect whether or not a speech signal or data is contained in the signal received by the antenna and the radio unit, if the receiving circuit is not in the soft hand-over mode.

5. (Previously Presented) A receiving circuit comprising:

an antenna and a radio unit for receiving a signal transmitted via a radio link;

a plurality of finger receivers for inversely diffusing the signal received by the antenna and the radio unit in association with respective multiple paths;

a synthesizer for synthesizing signals inversely diffused by said finger receivers;

means for controlling a number of finger receivers to operate, among said plurality of finger receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit; and

means for controlling the number of finger receivers to operate by controlling a supply of a clock signal to said plurality of finger receivers.

6. (Previously Presented) A receiving circuit comprising:

an antenna and a radio unit for receiving a signal transmitted via a radio link;

a plurality of finger receivers for inversely diffusing the signal received by the antenna and the radio unit in association with respective multiple paths;

a synthesizer for synthesizing signals inversely diffused by said finger receivers;

means for controlling a number of finger receivers to operate, among said plurality of finger receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit;

means for controlling a number of finger receivers to operate if a speech signal or data is not contained in the signal received by the antenna and the radio unit, based on a number of base stations which are communicating with the receiving circuit; and

means for controlling the number of finger receivers to operate by controlling a supply of a clock signal to said plurality of finger receivers.

7. (Previously Presented) A receiving circuit comprising:

an antenna and a radio unit for receiving a signal transmitted via a radio link;

a plurality of finger receivers for inversely diffusing the signal received by the antenna and the radio unit in association with respective multiple paths;

a synthesizer for synthesizing signals inversely diffused by said finger receivers;

means for controlling a number of finger receivers to operate, among said plurality of finger receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit;

means for controlling a number of finger receivers to operate if a speech signal or data is not contained in the signal received by the antenna and the radio unit, based on whether the receiving circuit is in a soft hand-over mode or not; and

means for controlling the number of finger receivers to operate by controlling a supply of a clock signal to said plurality of finger receivers.

8. (Previously Presented) A receiving circuit comprising:

an antenna and a radio unit for receiving a signal transmitted via a radio link;

a plurality of finger receivers for inversely diffusing the signal received by the antenna and the radio unit in association with respective multiple paths;

a synthesizer for synthesizing signals inversely diffused by said finger receivers;

means for controlling a number of finger receivers to operate, among said plurality of finger receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit;

means for controlling a number of finger receivers to operate if a speech signal or

data is not contained in the signal received by the antenna and the radio unit, based on whether the receiving circuit is in a soft hand-over mode or not;

means for operating as many finger receivers as a number of base stations which are communicating with the receiving circuit if the receiving circuit is in the soft hand-over mode, and operating a minimum number of finger receivers required to detect whether or not a speech signal or data is contained in the signal received by the antenna and the radio unit, if the receiving circuit is not in the soft hand-over mode; and

means for controlling the number of finger receivers to operate by controlling a supply of a clock signal to said plurality of finger receivers.

9. (Original) A receiving circuit comprising:

an antenna and a radio unit for receiving data;

a plurality of finger receivers for inversely diffusing the data received by the antenna and the radio unit in association with respective multiple paths;

a synthesizer for synthesizing signals inversely diffused by said finger receivers;

detecting means for detecting whether there is a speech signal or not based on the data inversely diffused by said finger receivers; and

control means for controlling a number of finger receivers to operate, among said plurality of finger receivers, based on a detected result from said detecting means.

10. (Original) A receiving circuit according to Claim 9, wherein said control means comprises means for operating all the finger receivers if a speech signal is detected by said detecting means.

11. (Original) A receiving circuit according to Claim 9, wherein at least one of said finger receivers is operated at all times without being controlled by said control means, and said detecting means comprises means for detecting whether there is a speech signal or not based on data inversely diffused by said at least one of the finger receivers.

12. (Original) A receiving circuit according to Claim 10, wherein at least one of said finger receivers is operated at all times without being controlled by said control means, and said detecting means comprises means for detecting whether there is a speech signal or not based on data inversely diffused by said at least one of the finger receivers.

13. (Original) A receiving circuit according to Claim 9, wherein at least two of said finger receivers are operated at all times without being controlled by said control means, and said detecting means comprises means for detecting whether there is a speech signal or not based on data inversely diffused by said at least two of the finger receivers.

14. (Original) A receiving circuit according to Claim 10, wherein at least two of said finger receivers are operated at all times without being controlled by said control means, and said detecting means comprises means for detecting whether there is a speech signal or not based on data inversely diffused by said at least two of the finger receivers.

15. (Original) A receiving circuit according to Claim 9, wherein said detecting means comprises a plurality of detecting means associated with said plurality of finger receivers, respectively.

16. (Original) A receiving circuit according to Claim 10, wherein said detecting means comprises a plurality of detecting means associated with said plurality of finger receivers, respectively.

17. (Original) A receiving circuit according to Claim 15, wherein said control means comprises means for operating, at all times, one of said plurality of fingers receivers which has a highest correlated value, and controlling operation of other finger receivers based on a detected result from the detecting means associated with said one of the finger receivers.

18. (Original) A receiving circuit according to Claim 16, wherein said control means comprises means for operating, at all times, one of said plurality of finger receivers which has a highest correlated value, and controlling operation of other finger receivers based on a detected result from the detecting means associated with said one of the finger receivers.

19. (Original) A receiving circuit according to Claim 9, wherein said detecting means comprises two detecting means associated respectively with two of said plurality of finger receivers, and said control means comprises means for operating the two finger receivers associated with said two detecting means at all times irrespective of detected results from said detecting means and controlling operation of other finger receivers based on the detected results from said detecting means if the receiving circuit is in a hand-over mode, and operating one of the two finger receivers associated with said two detecting means at all times irrespective of detected results

form said detecting means and controlling operation of other finger receivers based on the detected results from said detecting means if the receiving circuit is not in the hand-over mode.

20. (Original) A receiving circuit according to Claim 10, wherein said detecting means comprises two detecting means associated respectively with two of said plurality of finger receivers, and said control means comprises means for operating the two finger receivers associated with said two detecting means at all times irrespective of detected results from said detecting means and controlling operation of other finger receivers based on the detected results from said detecting means if the receiving circuit is in a hand-over mode, and operating one of the two finger receivers associated with said two detecting means at all times irrespective of detected results from said detecting means and controlling operation of other finger receivers based on the detected results from said detecting means if the receiving circuit is not in the hand-over mode.

21. (Original) A receiving circuit according to Claim 15, wherein said control means comprises means for operating, at all times, two of said plurality of finger receivers which have a highest correlated value irrespective of detected results from said detecting means, and controlling operation of other finger receivers based on detected results from the detecting means associated with said two of the finger receivers, if the receiving circuit is in a hand-over mode, and operating, at all times, one of said plurality of finger receivers which has a highest correlated value irrespective of detected results from said detecting means, and controlling operation of other finger receivers based on a detected result from the detecting means associated with said one of the finger receivers, if the receiving circuit is not in the hand-over mode.

22. (Original) A receiving circuit according to Claim 16, wherein said control means comprises means for operating, at all times, two of said plurality of ginger receivers which have a highest correlated value irrespective of detected results from said detecting means, and controlling operation of other finger receivers based on detected results from the detecting means associated with said two of the finger receivers, if the receiving circuit is in a hand-over mode, and operating, at all times, one of said plurality of finger receivers which has a highest correlated value irrespective of detected results from said detecting means, and controlling operation of other finger receivers based on a detected result from the detecting means associated with said one of the finger receivers, if the receiving circuit is not in the hand-over mode.

23. (Original) A receiving circuit comprising:

an antenna and a radio unit for receiving data;

a plurality of finger receivers for inversely diffusing the data received by the antenna and the radio unit in association with respective multiple paths;

a synthesizer for synthesizing signals inversely diffused by said finger receivers;

a decoder for decoding the data synthesized by said synthesizer;

detecting means for detecting whether there is a speech signal or not based on the data decoded by said decoder; and

control means for controlling a number of finger receivers to operate, among said plurality of finger receivers, based on a detected result form said detecting means.

24. (Original) A receiving circuit according to Claim 23, wherein said control means comprises means for operating all the finger receivers if a speech signal is detected by said detecting means.

25. (Original) A receiving circuit according to Claim 23, wherein said control means comprises means for operating, at all times, one of said plurality of finger receivers which has a highest correlated value.

26. (Original) A receiving circuit according to Claim 24, wherein said control means comprises means for operating, at all times, one of said plurality of finger receivers which as a highest correlated value.

27. (Original) A receiving circuit according to Claim 9, wherein said control means comprises means for controlling operation of said plurality of finger receivers by controlling supply of a clock signal to said plurality of finger receivers.

28. (Original) A receiving circuit according to Claim 15, wherein said control means comprises means for controlling operation of said plurality of finger receivers by controlling a supply of a clock signal to said plurality of finger receivers.

29. (Original) A receiving circuit according to Claim 23, wherein said control means comprises means for controlling operation of said plurality of finger receivers by controlling a supply of a clock signal to said plurality of finger receivers.

30. (Original) A mobile terminal having a receiving circuit according to Claim 2.

31. (Original) A mobile terminal having a receiving circuit according to Claim 5.

32. (Original) A mobile terminal having a receiving circuit according to Claim 9.

33. (Original) A mobile terminal having a receiving circuit according to Claim 15.

34. (Original) A mobile terminal having a receiving circuit according to Claim 23.

35. (Original) A mobile terminal having a receiving circuit according to Claim 27.

36. (Cancelled)

37. (Previously Presented) A method of receiving data by inversely diffusing a signal received by an antenna and a radio unit with a plurality of receivers of a receiving circuit in association with respective multiple paths, synthesizing inversely diffused signals, and outputting a synthesized signal, comprising the steps of:

controlling a number of receivers to operate, among said plurality of receivers, based on whether or not a communication signal is detected by a detection means received by the antenna and the radio unit; and

controlling the number of receivers to operate if a speech signal or data is not contained in the signal received by the antenna and the radio unit, based on a number of base stations which are communicating with the receiving circuit.

37

38. (Previously Presented) A method of receiving data by inversely diffusing a signal received by an antenna and a radio unit with a plurality of receivers of a receiving circuit in association with respective multiple paths, synthesizing inversely diffused signals, and outputting a synthesized signal, comprising the steps of:

40

37

controlling a number of receivers to operate, among said plurality of receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit; and

controlling the number of receivers to operate if a speech signal or data is not contained in the signal received by the antenna and the radio unit, based on whether a receiving circuit is in a soft hand-over mode or not.

38

39. (Previously Presented) A method of receiving data by inversely diffusing a signal received by an antenna and a radio unit with a plurality of receivers of a receiving circuit in association with respective multiple paths, synthesizing inversely diffused signals, and outputting a synthesized signal, comprising the steps of:

41

38

controlling a number of receivers to operate, among said plurality of receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit;

controlling the number of receivers to operate if a speech signal or data is not

contained in the signal received by the antenna and the radio unit, based on whether a receiving circuit is in a soft hand-over mode or not;

operating as many finger receivers as a number of base stations which are communicating with the receiving circuit if the receiving circuit is in the soft hand-over mode; and

operating a minimum number of finger receivers required to detect whether or not a speech signal or data is contained in the signal received by the antenna and the radio unit, if the receiving circuit is not in the soft hand-over mode.

39

40. (Previously Presented) A method of receiving data by inversely diffusing a signal received by an antenna and a radio unit with a plurality of receivers of a receiving circuit in association with respective multiple paths, synthesizing inversely diffused signals, and outputting a synthesized signal, comprising the steps of:

39

controlling a number of receivers to operate, among said plurality of receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit; and

controlling the number of receivers to operate by controlling a supply of a clock signal to said plurality of receivers.

40

41. (Previously Presented) A method of receiving data by inversely diffusing a signal received by an antenna and a radio unit with a plurality of receivers of a receiving circuit in association with respective multiple paths, synthesizing inversely diffused signals, and outputting a synthesized signal, comprising the steps of:

42

40

controlling a number of receivers to operate, among said plurality of receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit;

controlling the number of receivers to operate if a speech signal or data is not contained in the signal received by the antenna and the radio unit, based on a number of base stations which are communicating with the receiving circuit; and

controlling the number of receivers to operate by controlling a supply of a clock signal to said plurality of receivers.

41

42. (Previously Presented) A method of receiving data by inversely diffusing a signal received by an antenna and a radio unit with a plurality of receivers of a receiving circuit in association with respective multiple paths, synthesizing inversely diffused signals, and outputting a synthesized signal, comprising the steps of:

43

controlling a number of receivers to operate, among said plurality of receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit;

41

controlling the number of receivers to operate if a speech signal or data is not contained in the signal received by the antenna and the radio unit, based on whether a receiving circuit is in a soft hand-over mode or not; and

controlling the number of receivers to operate by controlling a supply of a clock signal to said plurality of receivers.

42

43. (Previously Presented) A method of receiving data by inversely diffusing a signal received by an antenna and a radio unit with a plurality of receivers of a receiving circuit in association with respective multiple paths, synthesizing inversely diffused signals, and outputting a synthesized signal, comprising the steps of:

controlling a number of receivers to operate, among said plurality of receivers, based on whether or not a communication signal is detected by a detection means in the signal received by the antenna and the radio unit;

44 controlling the number of receivers to operate if a speech signal or data is not contained in the signal received by the antenna and the radio unit, based on whether a receiving circuit is in a soft hand-over mode or not; 42

operating as many finger receivers as a number of base stations which are communicating with the receiving circuit if the receiving circuit is in the soft hand-over mode;

operating a minimum number of finger receivers required to detect whether or not a speech signal or data is contained in the signal received by the antenna and the radio unit, if the receiving circuit is not in the soft hand-over mode; and

controlling the number of receivers to operate by controlling a supply of a clock signal to said plurality of receivers.

43

44. (Previously Amended) A method of receiving data by inversely diffusing data received by an antenna and a radio unit with a plurality of receivers of a receiving circuit in association with respective multiple paths, synthesizing inversely diffused data, and outputting synthesized data, comprising the steps of:

41 43

detecting whether there is a speech signal or not based on the inversely diffused data;

and

controlling a number of receivers to operate, among said plurality of receivers, based on a detected result of whether there is a speech signal or not.

45. (Original) A method according to claim 44, further comprising the step of operating all the receivers if a speech signal is detected.

46. (Original) A method according to claim 44, further comprising the step of operating at least one of said plurality of receivers at all times.

47. (~~Original~~) A method according to claim 45, further comprising the step of operating at least one of said plurality of receivers at all times.

48. (Original) A method according to claim 44, further comprising the step of operating at least two of said plurality of receivers at all times.

49. (Original) A method according to claim 45, further comprising the step of operating at least two of said plurality of receivers at all times.

50. (Original) A method according to claim 44, further comprising the step of operating, at all times, one of said plurality of receivers which has a highest correlated value.

51. (Original) A method according to claim ~~45~~ 44, further comprising the step of operating, at all times, one of said plurality of receivers which has a highest correlated value.

52. (Original) A method according to claim ~~44~~ 43, further comprising the steps of:

operating at least two of said receivers at all times if the receiving circuit is in a hand-over mode; and

operating one of said receivers at all times if the receiving circuit is not in the hand-over mode.

53. (Original) A method according to claim ~~45~~ 44, further comprising the steps of:

operating at least two of said times if the receiving circuit is in a hand-over mode; and

operating one of said receivers at all times if the receiving circuit is not in the hand-over mode.

54. (Currently Amended) A method according to claim ~~52~~ 48, further comprising the steps of:

operating two of said receivers which have a highest correlated value at all ~~tines~~ times if the receiving circuit is in the hand-over mode; and

operating one of said receivers which has a highest correlated value at all times if the receiving circuit is not in the hand-over mode.

55. (Previously Amended) A method of ~~receiving~~ data by inversely diffusing data received by an antenna and a radio unit with a plurality of receivers of a receiving circuit in association with

respective multiple paths, synthesizing inversely diffused data, decoding synthesized data, and outputting decoded data, comprising the steps of:

detecting whether there is a speech signal or not based on the decoded data; and

controlling a number of receivers to operate, among said plurality of receivers, based on a detected result of whether there is a speech signal or not, wherein all of the receivers are operated if a speech signal is detected.

56. (Cancelled)

57. (Original) A method according to claim 55, further comprising the step of:

operating, at all times, one of said plurality of receivers which has a highest correlated value.

58. (Cancelled)

59. (Original) A method according to claim 44, further comprising the step of controlling operation of said plurality of receivers by controlling a supply of a clock signal to said plurality of receivers.

60. (Original) A method according to claim 45, further comprising the step of controlling operation of said plurality of receivers by controlling a supply of a clock signal to said plurality of receivers.

61. (Original) A method according to claim 52, further comprising the step of controlling operation of said plurality of receivers by controlling a supply of a clock signal to said plurality of receivers.

62. (Previously Amended) A method of receiving data by inversely diffusing data received by an antenna and a radio unit with a plurality of receivers of a receiving circuit in association with respective multiple paths, synthesizing inversely diffused data, decoding synthesized data, and outputting decoded data, comprising the steps of:

detecting whether there is a speech signal or not based on the decoded data; ~~and~~

controlling a number of receivers to operate, among said plurality of receivers, based on a detected result of whether there is a speech signal or not, wherein all of the receivers are operated if a speech signal is detected; and

controlling operation of said plurality of receivers by controlling a supply of a clock signal to said plurality of receivers

63. (Cancelled)

64. (Previously Presented) A mobile terminal having a receiving circuit according to claim 3.